

IN THE CLAIMS

1. (currently amended) An isolated complement inhibitor polypeptide ~~derived~~ obtained from a haematophagous arthropod that inhibits the classical complement pathway and the alternative complement pathway by inhibiting cleavage of C5 by classical and alternative C5 convertases, wherein the isolated complement inhibitor polypeptide is ~~a protein having~~ has at least ~~95%~~ 90% sequence identity to a protein comprising the amino acids 19 to 168 ~~of the amino acid sequence~~ of SEQ ID NO: 2.
2. (canceled).
3. (canceled).
4. (canceled).
5. (canceled).
6. (currently amended) The isolated complement inhibitor polypeptide ~~of according to claim 1,~~ wherein said isolated complement inhibitor polypeptide ~~which~~ inhibits cleavage of C5 by binding to C5.
7. (currently amended) The isolated complement inhibitor polypeptide ~~of according to claim 6,~~ wherein said isolated complement inhibitor polypeptide is complexed with C5.
8. (canceled).
9. (currently amended) The isolated complement inhibitor polypeptide ~~of according to claim 1,~~ wherein said haematophagous arthropod is a tick.
10. (currently amended) The isolated complement inhibitor polypeptide ~~of according to claim 9,~~ wherein said tick is *Ornithodoros moubata*.
11. (currently amended) The isolated complement inhibitor polypeptide ~~of according to claim 10,~~ comprising the amino acids 19 to 168 ~~of the amino acid sequence~~ of SEQ ID NO: 2.

12. (currently amended) The isolated complement inhibitor polypeptide ~~of according to~~ claim 10, comprising ~~amino acids 1 to 168 of~~ the amino acid sequence of SEQ ID NO: 2.

13. (currently amended) An ~~The~~ isolated complement inhibitor polypeptide that inhibits the classical and alternative complement pathways, wherein said complement inhibitor is:

a) a protein comprising the amino acids 19 to 168 ~~or amino acids 1 to 168 of the amino acid sequence of~~ SEQ ID NO: 2;

b) a protein comprising the amino acid sequence of SEQ ID NO: 2;

c) ~~a homologue of a~~ the protein as ~~defined in~~ of a) or b) having at least 95% sequence identity to SEQ ID NO: 2 ~~thereto~~; or

e) ~~d) a~~ an active fragment of ~~said protein as defined in a)~~ above the complement inhibitor polypeptide of SEQ ID NO: 2, wherein said ~~active~~ fragment comprises six cysteine residues that are spaced relative to each other at a distance of 32 amino acids apart, 62 amino acids apart, 28 amino acids apart, 1 amino acid apart, and 21 amino acids apart as arranged from the amino terminus to the carboxyl terminus of SEQ ID NO: 2, wherein said ~~active~~ fragment inhibits cleavage of C5 by classical and alternative C5 convertases.

14. (currently amended) An ~~The~~ isolated complement inhibitor polypeptide that inhibits cleavage of C5 by a C5 convertase, wherein said complement inhibitor is:

a) a protein comprising the amino acids 19 to 168 ~~or amino acids 1 to 168 of the amino acid sequence of~~ SEQ ID NO: 2;

b) a protein comprising the amino acid sequence of SEQ ID NO: 2;

c) ~~a homologue of a~~ the protein as ~~defined in~~ of a) or b) having at least 95% sequence identity to SEQ ID NO: 2 ~~thereto~~; or

e) ~~d) a~~ an active fragment of ~~said protein as defined in a)~~ above the complement inhibitor polypeptide of SEQ ID NO: 2, wherein said ~~active~~ fragment comprises six cysteine residues

that are spaced relative to each other at a distance of 32 amino acids apart, 62 amino acids apart, 28 amino acids apart, 1 amino acid apart, and 21 amino acids apart as arranged from the amino terminus to the carboxyl terminus of SEQ ID NO: 2, wherein said active fragment inhibits cleavage of C5 by classical and alternative C5 convertases.

15. (currently amended) The isolated complement inhibitor polypeptide of ~~according to~~ claim 14, wherein said isolated complement inhibitor polypeptide ~~which~~ inhibits cleavage of C5 by directly ~~direct~~ binding to C5.
16. (currently amended) The isolated complement inhibitor polypeptide of ~~according to~~ claim 15, wherein said isolated complement inhibitor polypeptide is complexed with C5.
17. (canceled).
18. (currently amended) A fusion protein comprising the isolated complement inhibitor polypeptide of ~~according to~~ claim 1, wherein said isolated complement inhibitor polypeptide that is genetically or chemically fused to a marker domain ~~one or more peptides or polypeptides~~.
19. (currently amended) The fusion protein of ~~according to~~ claim 18, wherein said ~~isolated complement inhibitor polypeptide is genetically or chemically fused to a marker domain~~ is a fluorescent tag, an epitope tag, an enzyme tag, or a radiochemical tag.
20. (currently amended) The fusion protein of ~~according to~~ claim 19, wherein said marker domain is a radiochemical tag.
21. (canceled).
22. (canceled).
23. (canceled).
24. (canceled).
25. (canceled).
26. (canceled).

27. (canceled).

28. (canceled).

29. (currently amended) A composition comprising the isolated complement inhibitor polypeptide of according to claim 1 or a fusion protein thereof, in conjunction with a ~~pharmaceutically~~ acceptable carrier.

30. (currently amended) The composition of according to claim 29, wherein said carrier is further comprising an adjuvant.

31. (canceled).

32. (canceled).

33. (canceled).

34. (canceled).

35. (canceled).

36. (canceled).

37. (canceled).

38. (canceled).

39. (canceled).

40. (canceled).

41. (currently amended) A ~~An active~~ fragment of the isolated complement inhibitor polypeptide of claim 11, wherein said ~~active~~ fragment comprises five cysteine residues that are spaced relative to each other at a distance of 32 amino acids apart, 62 amino acids apart, 28 amino acids apart, and 1 amino acid apart as arranged from the amino terminus to the carboxyl terminus of SEQ ID NO: 2, wherein said ~~active~~ fragment inhibits cleavage of C5 by classical and alternative C5 convertases.

42. (currently amended)     A ~~An active~~ fragment of the isolated complement inhibitor polypeptide of claim 11, wherein said ~~active~~ fragment comprises four cysteine residues that are spaced relative to each other at a distance of 32 amino acids apart, 62 amino acids apart, and 28 amino acids apart as arranged from the amino terminus to the carboxyl terminus of SEQ ID NO: 2, wherein said ~~active~~ fragment inhibits cleavage of C5 by classical and alternative C5 convertases.
43. (new)     A fusion protein comprising the isolated complement inhibitor polypeptide of claim 1, wherein said isolated complement inhibitor polypeptide is genetically or chemically fused to beta-galactosidase, glutathione-S-transferase, luciferase, a polyhistidine tag, a T7 polymerase fragment or a secretion signal peptide.